

WHAT IS CLAIMED IS:

1. An image forming apparatus, comprising:

a mainframe;

a process cartridge loadable in and unloadable from the

5 mainframe; and

an exposure unit that is arranged correspondingly with  
the process cartridge;

wherein the process cartridge includes:

a photosensitive body that is exposed by the

10 exposure unit to form an electrostatic latent image  
thereon, and

a processing device that acts on the photosensitive body;

and

relative positions of the photosensitive body and the

15 processing device are changeable at the time the process  
cartridge is loaded and unloaded.

2. The image forming apparatus as claimed in claim 1, wherein  
the photosensitive body includes a plurality of photosensitive

20 bodies corresponding to a plurality of colors.

3. The image forming apparatus as claimed in claim 1,

wherein the processing device faces a surface of the  
photosensitive body and acts on the photosensitive body without

25 contacting.

4. The image forming apparatus as claimed in claim 1,  
wherein the processing device contacts a surface of the  
photosensitive body while acting on the photosensitive body;

5 and

the processing device is separated from the  
photosensitive body at the time the process cartridge is loaded  
and unloaded.

10 5. The image forming apparatus as claimed in claim 1,  
wherein the processing device includes one of a charging  
unit that uniformly charges a surface of the photosensitive  
body prior to the formation of the electrostatic latent image,  
a developing unit that supplies a charged developing agent onto  
15 a surface of the photosensitive body on which the electrostatic  
latent image is formed to develop the electrostatic latent image,  
and a cleaning unit that removes developing agent remaining  
on the surface of photosensitive body after a transfer of the  
developing agent is performed.

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6. The image forming apparatus according to claim 1,  
wherein the processing device is a developing unit that  
supplies a charged developing agent onto the surface of  
photosensitive body on which the electrostatic latent image  
25 is formed to develop the electrostatic latent image; and

the process cartridge includes a grip portion disposed on the developing unit.

7. The image forming apparatus according to claim 1,  
5 wherein the main frame includes a guide portion that guides a movement of the process cartridge at the time of loading and unloading.

8. The image forming apparatus according to claim 7,  
10 wherein the at least one of the photosensitive body and the processing device have a guided portion fittable with the guide portion; and

the relative positions change due to at least one of the photosensitive body and the predetermined processing device  
15 moving along the guide portion.

9. The image forming apparatus as claimed in claim 1,  
wherein the process cartridge includes an elastic body disposed between the photosensitive body and the processing  
20 device so that, when the process cartridge is removed from the main frame, the relative positions can assume a predetermined positional relation where the process cartridge is easily loaded in the main frame.

25 10. The image forming apparatus as claimed in claim 9,

wherein the predetermined positional relation is a positional relation immediately after the process cartridge has been taken out from the mainframe.

5 11. The image forming apparatus as claimed in claim 9,  
wherein the processing device includes a charging unit that uniformly charges a surface of the photosensitive body prior to the formation of the electrostatic latent image and a developing unit that supplies a charged developing agent onto  
10 the surface of the photosensitive body on which the electrostatic latent image is formed to develop the electrostatic latent image;  
and

the elastic body includes a first elastic body that connects the charging unit with the photosensitive body and  
15 a second elastic body that connects the developing unit with the photosensitive body.

12. The image forming apparatus as claimed in claim 1,  
wherein the photosensitive body includes a photosensitive  
20 drum; and

the processing device relatively moves around an axial line of the photosensitive drum.

13. The image forming apparatus as claimed in claim 1,  
25 wherein the photosensitive body includes a photosensitive

drum; and

the process cartridge is loaded and unloaded in a direction substantially orthogonal to an axial line of the photosensitive drum.

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14. A process cartridge loadable in and unloadable from an image forming apparatus, comprising:

a photosensitive body; and

a processing device acting on the photosensitive body;

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wherein relative positions of the photosensitive body and the processing device are changeable when the process cartridge is loaded in and unloaded from the image forming apparatus.

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15. The process cartridge as claimed in claim 14,

wherein the processing device faces a surface of the photosensitive body and acts on the photosensitive body without contacting.

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16. The process cartridge as claimed in claim 14,

wherein the processing device contacts a surface of the photosensitive body while acting on the photosensitive body; and

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the processing device is separated from the photosensitive body at the time the process cartridge is loaded

and unloaded.

17. The process cartridge as claimed in claim 14,

wherein the processing device includes one of a charging  
5 unit that uniformly charges a surface of the photosensitive  
body prior to the formation of an electrostatic latent image  
thereon, a developing unit that supplies a charged developing  
agent onto the surface of the photosensitive body on which the  
electrostatic latent image is formed to develop the  
10 electrostatic latent image, and a cleaning unit that removes  
developing agent remaining on the surface of the photosensitive  
body after a transfer of the developing agent is performed.

18. The process cartridge as claimed in claim 14,

15 wherein the processing device is a developing unit that  
supplies a charged developing agent onto a surface of the  
photosensitive body on which an electrostatic latent image is  
formed to develop the electrostatic latent image; and

the process cartridge includes a grip portion disposed  
20 on the developing unit.

19. The process cartridge as claimed in claim 14,

wherein at least one of the photosensitive body and the  
processing device have a guided portion fittable with a guide  
25 portion that is provided in the image forming apparatus.

20. The process cartridge as claimed in claim 14, further comprising: an elastic body disposed between the photosensitive body and the processing device so that, when the process cartridge is removed from the image forming apparatus, the relative positions can assume a predetermined positional relation where the process cartridge is easily loaded in the image forming apparatus.

21. The process cartridge as claimed in claim 20, wherein the predetermined positional relation is a positional relation immediately after the process cartridge has been taken out from the image forming apparatus.

22. The process cartridge as claimed in claim 20, wherein the processing devices includes a charging unit that uniformly charges a surface of the photosensitive body prior to the formation of an electrostatic latent image and a developing unit that supplies a charged developing agent to the surface of the photosensitive body on which the electrostatic latent image is formed to develop the electrostatic latent image; and

the elastic body includes a first elastic body that connects the charging unit with the photosensitive body and a second elastic body that connects the developing unit with

the photosensitive body.

23. The process cartridge as claimed in claim 14,  
wherein the photosensitive body includes a photosensitive

5 drum; and

the processing device relatively moves around an axial  
line of the photosensitive drum.

24. The process cartridge as claimed in claim 14,

10 wherein the photosensitive body includes a photosensitive  
drum; and

the process cartridge is loaded and unloaded in a direction  
substantially orthogonal to an axial line of the photosensitive  
drum.

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25. A image forming apparatus, comprising:

a mainframe having a guide portion;

a process cartridge that is loadable in and unloadable  
from the mainframe while being guided by the guide portion,  
20 the process cartridge accommodating a photosensitive body and  
a processing device that acts on the photosensitive body;

wherein the guide portion guides one of the photosensitive  
body and the processing device to shift a position of the one  
of the photosensitive body and the processing device relative  
25 to the process cartridge when the process cartridge is loaded



in and unloaded from the mainframe.

26. The image forming apparatus as claimed in claim 25, further  
comprising: an elastic body that is interposed between the  
5 photosensitive body and the processing device.